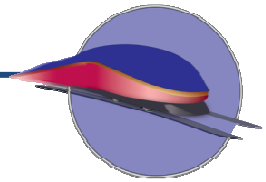
Corridor Program Name: VT-Ethan Allen Express-Improv&Extension *Date of Submission:* 10/02/09 *Version Number:* 1

High-Speed Intercity Passenger Rail (HSIPR) Program



Track 2–Corridor Programs: Application Form

Welcome to the Application Form for Track 2–Corridor Programs of the Federal Railroad Administration's High-Speed Intercity Passenger Rail (HSIPR) Program.

This form will provide information on a cohesive set of projects—representing a phase, geographic segment, or other logical grouping—that furthers a particular corridor service.

Definition: For purposes of this application, a "Corridor Program" is "a group of projects that collectively advance the entirety, or a 'phase' or 'geographic section,' of a corridor service development plan." *(Guidance, 74 Fed, Reg. 29904, footnote 4).* **A Corridor Program must have independent utility and measurable public benefits.**

In addition to this application form and required supporting materials, applicants are required to submit a Corridor Service Overview.

An applicant may choose to represent its vision for the entire, fully-developed corridor service in one application or in multiple applications, provided that the set of improvements contained in each application submitted has independent utility and measurable public benefits. The same Service Development Plan may be submitted for multiple Track 2 Applications. Each Track 2 application will be evaluated independently with respect to related applications. Furthermore, FRA will make its evaluations and selections for Track 2 funding based on an entire application rather than on its component projects considered individually.

We appreciate your interest in the HSIPR Program and look forward to reviewing your entire application. If you have questions about the HSIPR program or the Application Form and Supporting Materials for Track 2, please contact us at HSIPR@dot.gov.

Instructions for the Track 2 Application Form:

- Please complete the HSIPR Application electronically. See Section G of this document for a complete list of the required application materials.
- In the space provided at the top of each section, please indicate the Corridor Program name, date of submission (mm/dd/yyyy), and an application version number assigned by the applicant. The Corridor Program name must be identical to the name listed in the Corridor Service Overview Master List of Related Applications. Consisting of less than 40 characters, the Corridor Program name must consist of the following elements, each separated by a hyphen: (1) the State abbreviation of the State submitting this application; (2) the route or corridor name that is the subject of the related Corridor Service Overview; and (3) a descriptor that will concisely identify the Corridor Program's focus (e.g., HI-Fast Corridor-Main Stem).

- Section B, Question 10 requires a distinct name for each project under this Corridor Program. Please the following the naming convention: (1) the State abbreviation; (2) the route or corridor name that forms part of the Corridor Program name; and (3) a project descriptor that will concisely identify the project's focus (e.g., HI-Fast Corridor-Wide River Bridge). For projects previously submitted under another application, please use the **same name** previously used on the project application.
- For each question, enter the appropriate information in the designated gray box. If a question is not applicable to your Track 2 Corridor Program, please indicate "N/A."
- Narrative questions should be answered within the limitations indicated.
- Applicants must up load this completed and all other application materials to www.GrantSolutions.gov by October 2, 2009 at 11:59 pm EDT.
- Fiscal Year (FY) refers to the Federal Government's fiscal year (Oct. 1- Sept. 30).

Corridor Program Name: VT-Ethan Allen Express-Improv&Extension *Date of Submission:* 10/02/09 *Version Number:* 1

A. Point of Contact and Application Information

(1) Application Point of Contact (POC) Name: **Charlie Miller**		**POC Title:** **Rail Planning Coordinator**		
Applicant State Agency or Organization Name: **Vermont Agency of Transportation**				
Street Address: One National Life Drive	**City:** **Montpelier**	**State:** **VT**	**Zip Code:** **05633-5001**	**Telephone Number:** **802-828-5719**
Email: charlie.miller@state.vt.us		**Fax: 802-828-2829**		

Corridor Program Name: VT-Ethan Allen Express-Improv&Extension *Date of Submission:* 10/02/09 *Version Number:* 1

B. Corridor Program Summary

(1) Corridor Program Name: Ethan Allen Express Improv. & Extension

(2) What are the anticipated start and end dates for the Corridor Program? *(mm/yyyy)*
Start Date: 01/01/10 **End Date:** 12/31/12

(3) Total Cost of the Corridor Program: (Year of Expenditure (YOE) Dollars*) $ $73,520,271

Of the total cost above,, how much would come from the FRA HSIPR Program: (YOE Dollars**) $ $71,520,271

Indicate percentage of total cost to be covered by matching funds: 3 %

Please indicate the source(s) for matching funds: State Transportation Funds and VTR/CLP

***** Year-of-Expenditure (YOE) dollars are inflated from the base year. Applicants should include their proposed inflation assumptions (and methodology, if applicable) in the supporting documentation.
** This is the amount for which the Applicant is applying.

(4) Corridor Program Narrative. *Please limit response to 12,000 characters.*

Describe the main features and characteristics of the Corridor Program, including a description of:

- The location(s) of the Corridor Program's component projects including name of rail line(s), State(s), and relevant jurisdiction(s) (include a map in supporting documentation).
- How this Corridor Program fits into the service development plan including long-range system expansions and full realization of service benefits.
- Substantive activities of the Corridor Program (e.g., specific improvements intended).
- Service(s) that would benefit from the Corridor Program, the stations that would be served, and the State(s) where the service operates.
- Anticipated service design of the corridor or route with specific attention to any important changes that the Corridor Program would bring to the fleet plan, schedules, classes of service, fare policies, service quality standards, train and station amenities, etc.
- How the Corridor Program was identified through a planning process and how the Corridor Program is consistent with an overall plan for developing High-Speed Rail/Intercity Passenger Rail service, such as State rail plans or plans of local/regional MPOs.
- How the Corridor Program will fulfill a specific purpose and need in a cost-effective manner.
- The Corridor Program's independent utility.
- Any use of new or innovative technologies.
- Any use of railroad assets or rights-of-way, and potential use of public lands and property.
- Other rail services, such as commuter rail and freight rail that will make use of, or otherwise be affected by, the Corridor Program**.**
- Any PE/NEPA activities to be undertaken as part of the Corridor Program, including but not limited to: design studies and resulting program documents, the approach to agency and public involvement, permitting actions, and other key activities and objectives of this PE/NEPA work.

The Ethan Allen Express Improvements and Extension Corridor Program consists of track and crossing improvements (throughout the corridor), and a bridge project (on the CLP) along the existing Ethan Allen Express Amtrak route, as well as an extension of that service from Rutland, VT to Burlington, VT (please see attached location map).

Improvements will be initiated at mp A77.35 of the CLP in Whitehall, NY, continuing on the CLP to mp A99.79 (R&W junction). The improvements will enter the Vermont Railway at that switch with continued improvements between mp 54.20 to mp 121.90 (for precise details on improvements, please refer to the PE materials)

Purpose and Need: The corridor program will serve to support intercity passenger rail service through the most populous area of the State of Vermont and further connect vital economic regions of the State to each other and the State of New York. The Ethan Allen Express extension forms one of the six key projects envisioned in the recently announced New England Governors' initiative on passenger rail. Announced in July 2009, the Vision for the New England High Speed and Intercity Rail Network entails a coordinated regional strategy for high speed rail that will connect major cities and airports, and support economic growth throughout the region. The vision lays out key projects that strengthen passenger and freight rail service along new and existing rail corridors, of which a Vermont Western Corridor will eventually provide direct service along the western side of the state connecting Burlington, Rutland, and Bennington with Albany and New York City via the Empire Corridor. The Ethan Allen Express is further expected to benefit from planned improvements along the Empire Corridor, which will result in decreased travel times and better reliability for the entire route. This includes planned double-tracking of a single track bottleneck between the Albany/Rensselaer and Schenectady stations, and improvements to the CP main line between Schenectady and Glens Falls, that will enhance capacity and raise track speeds.

This corridor program would serve to connect populations in western Vermont and will support increased tourism, economic development, improve environmental quality (through a reduction in emissions caused by automobile trips), and provide a quality transportation option for travel between New York's Hudson Valley region and Western Vermont.

Since the mid-1990s, the State of Vermont has made significant capital investments along Vermont's Western Rail Corridor that includes the Vermont Railway between Burlington, VT and Hoosick Junction, NY in anticipation of passenger rail service in the corridor. These investments in the past 5 years alone have exceeded $12million, and $4.3million is currently programmed for the state fiscal year ending June 30th. In addition, Vermont provides Amtrak an annual operating subsidy of ?? to provide passenger rail service along the Ethan Allen Express. The track improvements included in this grant application will result in an OTP along the CLP of 90%, significantly higher than its current level of under 50%. The track improvements in the area along the extended service to Burlington will similarily maintain that high level of performance.

Planning for passenger rail service along this corridor began in the 1990s. In 2001, Amtrak developed a Service Development Plan that identified various options Vermont could consider in an attempt to establish passenger rail service to communities that have not had rail service since 1953. The 2006 Vermont State Rail & Policy Plan identified preservation of existing Amtrak service and new service along the Western Rail Corridor as the highest passenger rail priorities. In addition, the Vermont Rail Advisory Council - established to advise Vermont's Governor on rail policy and projects and composed of both public entity and private railroad members - have recommended numerous projects aimed at improving and establishing rail service along this corridor . At the regional level, the Western Corridor Transportation Plan - devloped by communities and regional organizations along the 200-mile corridor - also identified the proposed corridor program as the highest passenger rail priority. At the community level, planning and support for passenger rail service has been ongoing. Both the City of Rutland Master Plan (2002) and the Rutland Regional Plan (2008) advocate for and support service for extended rail service to Burlington. The City of Burlington Municipal Development Plan (2006) was developed with the assumption that passenger rail service along the Western Rail Corridor would be established - including its land use component. Sections of these Plans which reference strategies, recommendations and support are attached. VTrans has the full version of all these documents and can be forwarded upon request.

Planning for the corridor program has also ocurred within a multi-state framework. The New England Vision for High-Speed and Intercity Rail Network was collectively developed by the State DOTs of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut (see attached map and planning document). This multi-state effort ensures that the proposed corridor program is consistent with mobility and connectivity that is regional and national in scope.

The extension of the Ethan Allen Express from its current termination point in Rutland will include an additional stop at a temporary station in Middlebury,VT and its termination will be at the Main Street Landing station in Burlington. The Town of Middlebury is undergoing a planning process to determine the permanent location of their station and the Main Street Landing station in Burlington was fully rehabilitated in 1999.

The current Amtrak schedule will require some modifications to allow for the additional trip time to Burlington but no other changes are foreseen. The service will maintain its one daily trip in each direction.

According to Amtrak's calculations, the service extension to Burlington will result in annual direct cost savings to Vermont of approximately $300,000 due to the very strong ridership potential in Middlebury and Burlington. The new service will therefore provide passenger rail acces to two additional communities at a reduced cost to the State, and result in a more effictive use of the current train sets.

Once the track improvements project has been completed, effictive and efficient passenger service can begin in Burlington, thereby resulting in independent utility.

Projects proposed as part of this corridor program are within the railroad right-of-way, with no impacts to private lands foreseen. Public assets utilized include the Rutland Rail Station (municipal) and the Vermont Railway right-of-way, which is owned by the State of Vermont.

Freight rail is the only other rail service provided along the corridor . The projects contained in this corridor program will result in more efficient and dependeable freight service along the Vermont Railway, particularily as one of the largest freight shippers in Vermont is located on the line, and shipments of petroleum products to Burlington are critical to the economic prosperity of the region.

Projects contained in this corridor program will occur on previosuly distrubed lands, within the railroad right-of-way. Due to the minimal expected impacts of the corridor program and the very high level of public participation over the past 10 years in planning of these improvements and service expansion, no significant NEPA work is anticipated. A service NEPA is currently being finalized and Western Rail Corridor project improvements have already undergone a NEPA project process and issued a Categorical Exclusion. Attached is the documentation required for a CE for the proposed work on the CLP.

The corridor program is strongly supported by local communities, public transit providers, and regional planning organizations as evidenced by the attached letters of support. In addition, the Vermont Legislature has directed VTrans - through Act 50 - to specifically apply for ARRA funds for intercity passenger rail improvements along the Western Rail Corridor (see attachment).

(5) Describe the service objective(s) for this Corridor Program *(check all that apply):*

- ☐ Additional Service Frequencies
- ☒ Improved Service Quality
- ☒ Improved On-Time performance on Existing Route
- ☐ Reroute Existing Service
- ☒ Increased Average Speeds/Shorter Trip Times
- ☐ New Service on Existing IPR Route
- ☐ New Service on New Route
- ☒ Other *(Please Describe):* Service Extension

(6) Right-of-Way-Ownership. Provide information for all railroad right-of-way owners in the Corridor Program area. Where railroads currently share ownership, identify the primary owner. *If more than three owners, please detail in Section F of this application.*

Type of Railroad	Railroad Right-of-Way Owner	Route Miles	Track Miles	Status of agreements to implement projects
Regional or Sho	Clarendon and Pittsford Railroad	24.4	24.4	Preliminary Executed Agreement/MOU
Regional or Sho	State of Vermont	67.7	67.7	Preliminary Executed Agreement/MOU
Class 1 Freight				Master Agreement in Place

(7) Services. Provide information for all existing rail services within Corridor Program boundaries (freight, commuter, and intercity passenger). *If more than three services, please detail in Section F of this application.*

Type of Service	Name of Operator	Top Speed Within Boundaries	Number of Route Miles	Average Number of Daily	Notes

		Passenger	Freight	Within Boundaries	One-Way Train Operations within Boundaries[1]	
Intercity Pass	Amtrak	59mph		52.2	2	
Freight	VTR		40mph	302	8	
Freight	CLP		40mph	90	4	

(8) Rolling Stock Type. Describe the fleet of locomotives, cars, self-powered cars, and/or trainsets that would be intended to provide the service upon completion of the Corridor Program. *Please limit response to 2,000 characters.*

The current service and extended service will be utilizing current Amtrak/Amfleet equipment . There is currently no dedicated rolling stock, and Amtrak equipment cycles through Penn Station.

(9) Intercity Passenger Rail Operator. If applicable, provide the status of agreements with partners that will operate the benefiting high-speed rail/intercity passenger rail service(s) (e.g., Amtrak). If more than one operating partner is envisioned, please describe in Section F.

Name of Operating Partner: Amtrak - fully executed annual agreement with Amtrak

Status of Agreement: Preliminary executed agreement/MOU

[1] One round trip equals two one-way train operations.

(10) Master Project List. Please list all projects included in this Track 2 Corridor Program application in the table below. If available, include more detailed project costs for each project as a supporting form (see Section G below).

Project Name	Project Type	Project Description	Project Start Date (*mm/yyyy*)	Estimated Project Cost (Millions of YOE Dollars, One Decimal)		Was this Project included in a prior HSIPR application? Indicate track number(s).	Are more detailed project costs included in the Supporting Forms?
				Total Cost	Amount Applied For		
Track Improvements	Final Design/C	Track and roadbed upgrades	01/01/2010	70,239,644		No	Yes
Crossing Improvements	PE/ NEPA	Improvements to 13 crossings	01/01/2010	150,000		No	Yes
Crossing Improvemen ts	Final Design/C	Improvements to 13 crossings	01/01/2011	1,180,627		No	Yes
Ira Bridge Improvement	PE/ NEPA	Design/engineering and permitting for bridge and abuttments	03/01/2010	400,000		No	Yes
Ira Bridge Improvement	Final Design/C	Replace bridge and abuttments	07/01/2011	1,550,000		No	Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes

Note: In addition to **program** level supporting documentation, all applicable **project** level supporting documentation is required prior to award. If project level documentation is available now, you may submit it; however, if it is not provided in this application, this project may be considered as a part of a possible Letter of Intent but will not be considered for FD/Construction grant award until this documentation has been submitted.

In narrative form, please describe the sequencing of the projects listed in Question 10. Which activities must be pursued sequentially, which can be done at any time, and which can be done simultaneously? *Please limit response to 4,000 characters.*

Final design for the track work portion of the corridor will be completed in early Spring 2010 and procurement of materials for the project will begin at that time. The engineering and design for the crossings project will begin immediately upon award, with construction expected within 12 months of the start of design/enginnering. Materials procurement will include crossties, continuous welded rail, turnouts and signal materials, and is expected to take 12 months. The construction phase will take 18 months and include installing crossties, surface track, bridge rehabilitation, distching, drainage and slope stabilization, installation of continuous welded rail, installation of turnouts, installation of grade crossing surfaces, signal upgrades, construction of siding tracks, and final surfacing.

The Ira bridge project has design/engineering and permitting requirements and will begin shortly after award of funding, with anticipated final design/construction in approximately 15 months.

Fore more details on scheduling, please refer to the FRA Corridor Program and Project forms.

Corridor Program Name: VT-Ethan Allen Express-Improv&Extension *Date of Submission:* 10/02/09 *Version Number:* 1

C. Eligibility Information

(1) Select applicant type, as defined in Appendix 1.1 of the HSIPR Guidance:

☒ State
☐ Amtrak

If one of the following, please append appropriate documentation as described in Section 4.3.1 of the HSIPR Guidance:

☐ Group of States
☐ Interstate Compact
☐ Public Agency established by one or more States
☐ Amtrak in cooperation with a State or States

(2) Establish completion of all elements of a Service Development Plan. Note: One Service Development Plan may be referenced in multiple Track 2 Applications for the same corridor service.
Please provide information on the status of the below Service and Implementation Planning Activities:

	Select One of the Following:			**Provide Dates for all activities:**	
	No study exists	Study Initiated	Study Completed	Start Date (mm/yyyy)	Actual or Anticipated Completion Date (mm/yyyy)
Service Planning Activities/Documents					
Purpose & Need/Rationale	☐	☐	☒	01/01/2000	07/01/2001 (original study) and 10/01/2009 (update)
Service/Operating Plan	☐	☐	☒	01/01/2000	07/01/2001 (original study) and 10/01/2009 (update)
Prioritized Capital Plan	☐	☐	☒	01/01/2000	07/01/2001 (original study) and 10/01/2009 (update)
Ridership/Revenue Forecast	☐	☐	☒	01/01/2000	07/01/2001 (original study) and 10/01/2009 (update)
Operating Cost Forecast	☐	☐	☒	01/01/2000	07/01/2001 (original study) and 10/01/2009 (update)
Assessment of Benefits	☐	☐	☒	01/01/2000	07/01/2001 (original study) and 10/01/2009 (update)
Implementation Planning Activities/Documents					
Program Management Plan	☐	☐	☒	01/01/2000	10/01/2009
Financial Plan (capital & operating – sources/uses)	☐	☐	☒	01/01/2000	10/01/2009
Assessment of Risks	☐	☐	☒	01/01/2000	10/01/2009

(3) Establish Completion of Service NEPA Documentation (the date document was issued and how documentation can be verified by FRA). The following are approved methods of NEPA verification (in order of FRA preference): 1) References to large EISs and EAs that FRA has previously issued, 2) Web link if NEPA document is posted to a website (including www.fra.gov), 3) Electronic copy of non-FRA documents attached with supporting documentation, or 4) a hard copy of non-FRA documents (large documents should not be scanned but should be submitted to FRA via an express delivery service). See HSIPR Guidance Section 1.6 and Appendix 3.2.9.

Note to applicants: Prior to obligation of funds for FD/Construction activities under Track 2, all project specific documents will be required (e.g. Project NEPA, Financial Plan, and Project Management Plan).

Documentation	Date *(mm/yyyy)*	Describe How Documentation Can be Verified
Tier 1 NEPA EA	10/23/2009	Documentation submitted with this application and finalized by 10/23/09
Tier 1 NEPA EA		
Tier 1 NEPA EA		

(4) Indicate if there is an environmental decision from FRA (date document was issued and web hyperlink if available)

Documentation	Date *(mm/yyyy)*	Hyperlink *(if available)*
Finding of No Significant Impact		
Finding of No Significant Impact		
Finding of No Significant Impact		

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D.Public Return on Investment

(1) 1A. Transportation Benefits. *See HSIPR Guidance Section 5.1.1.1. Please limit response to 8,000 characters.*

How is the Corridor Program anticipated to improve Intercity Passenger Rail (IPR) service? Describe the overall transportation benefits, including information on the following *(please provide a level of detail appropriate to the type of investment):*

- Introduction of new IPR service: Will the Corridor Program lead directly to the introduction of a new IPR service that is not comparable to the existing service (if any) on the corridor in question? Describe the new service and what would make it a significant step forward in intercity transportation.
- IPR network development: Describe projected, planned, and potential improvements and/or expansions of the IPR network that may result from the Corridor Program, including but not limited to: better intermodal connections and access to stations; opportunities for interoperability with other services; standardization of operations, equipment, and signaling; and the use of innovative technologies.
- IPR service performance improvements *(also provide specific metrics in table 1B below)*: Please describe service performance improvements directly related to the Corridor Program, as well as a comparison with any existing comparable service. Describe relevant reliability improvements (e.g., increases in on-time performance, reduction in operating delays), reduced schedule trip times, increases in frequencies, aggregate travel time savings (resulting from reductions to both schedule time and delays, e.g., expressed in passenger-minutes), and other relevant performance improvements.
- Suggested supplementary information (*only when applicable*):
  - Transportation Safety: Describe overall safety improvements that are anticipated to result from the Corridor Program, including railroad and highway-rail grade crossing safety benefits, and benefits resulting from the shifting of travel from other modes to IPR service.
  - Cross-modal benefits from the Corridor Program, including benefits to:
    - ✓ Commuter Rail Services – Service improvements and results (applying the same approach as for IPR above).
    - ✓ Freight Rail Services – Service performance improvements (e.g., increases in reliability and capacity), results (e.g. increases in ton-miles or car-miles of the benefiting freight services), and/or other congestion, capacity or safety benefits.
    - ✓ Congestion Reduction/Alleviation in Other Modes; Delay or Avoidance of Planned Investments – Describe any expected aviation and highway congestion reduction/alleviation, and/or other capacity or safety benefits. Also, describe any planned investments in other modes of transportation (and their estimated costs if available) that may be avoided or delayed due to the improvement to IPR service that will result from the Corridor Program.

Below is a summary of public benefits associated with this corridor program. The attached Economic Impact Analysis further details these benefits.

The Ethan Allen Express (EAE) Improvements and Extension extends the current state-supported Ethan Allen Express Amtrak service north from its current terminus in Rutland, VT to Burlington, VT. This extension, which will upgrade existing rail lines, including the Clarendon and Pittsford line between Whitehall, NY and Rutland, would effectively double the reach of the current Ethan Allen service in Vermont, allowing the populations of Middlebury (pop. 8,271) and Burlington metropolitan statistical area (2000 population 169,391) direct access to passenger rail. Furthermore, the proposed improvements will decrease travel times and improve reliability over the segment between Whitehall and Rutland.

The implementation of the EAE is the first step in bringing expanded passenger service to Vermont's western region and adjacent upstate New York. A separate Track III HSIPR application that was previously submitted, entails developing a comprehensive plan for additional services along the entire western region, of which the EAE extension will form a core element. In addition, the EAE and other potential services are expected to benefit from planned improvements along the Empire Corridor, which will result in decreased travel times and better reliability for the entire route. These plans include double-tracking of a single track bottleneck between the Albany/Rensselaer and Schenectady stations, and improvements to the CP main line between Schenectady and Glens Falls. These improvements will enhance capacity and raise track speeds.

The EAE extension will more than pay for the additional operating costs, and produce improved performance metrics, including seat utilization and subsidy required per passenger mile. In 2012, the first year of full operation, implementation of the service would result in an increase in ticket revenues from $2,616 to $3,805 million, a net increase of $1.2 million. At the same time, operating costs would be increased by only $1 million, producing a net reduction in financial support of approximately $170,000. In 2012, passenger volumes would increase by 20,800 passengers to 70,700, an increase of almost 40% over the base. These additional passengers would be attracted primarily through the Burlington service, and secondarily from improved reliability and travel time resulting from improvements to the CLP segment between Whitehall and Rutland over which the train currently operates.

Implementation of the service will result in a variety of transportation benefits. These are as follows:

 Safety. Safety benefits will accrue primarily from travelers who would switch from driving their automobile to using the train. In 2012, the startup year, approximately 8,000 auto trips would be diverted. Compounding this decline in personal vehicle highway travel will be a decrease in truck traffic resulting from shorter travel times as a result of improvements in the track. Combined, the benefits from reduced traffic accidents will amount to $69,000 in 2012, and increasing to $117,000 in 2030.

 Freight rail service will benefit from shorter travel times and increased service reliability along the entire route between Whitehall, Rutland and Burlington. Travel time over the 67.7 mile route between Rutland and Burlington will decrease from around 4:30 to 2:00, and savings over the 24.4 Whitehall-Rutland segment are expected to amount to 30 minutes. Thus, with these rather short distances, the impact is expected to amount to an increase of 4.44 million ton-miles on a basis of 226.27 million in 2012. By 2030, this gain is forecast to be 6.13 million ton-miles.

 The train will operate through a relatively uncongested corridor, and thus investments in alternative modes will not be avoided or delayed at present. However, implementation at this time ensures the availability of an option that will be increasingly valuable as the region continues to grow at a higher rate than is prevalent in New England. In the initial service year of 2012, approximately 2,500 passengers who travel by air between Burlington and the New York area are expected to take the train. Similarly, as noted previously, 8,000 auto trips will shift to rail.

(1) Time Savings- Passenger & Freight Rail

* Existing passengers on the CLP line decrease their travel time by 45 minutes.

* Additional passengers reduce their travel time by 10 minutes through a modal switch from car to rail between Rutland and Burlington.

* Increasing freight speeds from 15mph to 30 MPH decrease overall inventory carrying costs (capital lock up). This is net of the decreased speed when compared to truck freight for diverted volumes.

(2) Operational costs savings

* Additional passengers on the VTR Rutland to Burlington segment save $99 by replacing the $114 cost per trip (car operating cost; $.58/mile for 67 miles) with a $15 estimated rail fare, solely for the segment of the trip between Whitehall, NY and Rutland/Burlington.

* The cost differential of diverting freight from truck ($.25 per ton mile) to rail ($.05 per tone mile) provides

overall cost savings to shippers.

(2) Safety Benefit

*Total vehicle miles traveled (VMT) reduction on Highway 7 is 2.6 million by 2030 which leads to a reduction in accidents.

* No-Build crash rates for fatalities, injuries and property damage accident rates are .04, 12, and 198 respectively.

* Costs per accident type are $3.6 million for fatal accidents, $211,000 for injuries, and $2,800 for property damage.

(3) Improvement in Reliability

*Increasing On-Time Performance (OTP) from 57.7% to 90% reduces buffer time delay (additional time factored into trip for unanticipated delay) by 33%.

* Average value per hour of buffer time is $21.20

(4) Reduced Fuel Use

* Fuel consumption is already included in vehicle operation costs per mile for cars ($.58) and freight costs per ton mile for trucks ($.25).

* Total fuel consumption:

- In 2030, car VMT reduction on Highway 7 is 2.2 million
- Average car fuel consumption is 23 miles per VMT.
- In 2030, truck VMT is 387,000
- Average truck fuel consumption is 6 mpg
- Overall combined reduction in fuel consumption is 162,000 gallons

(5) Emissions

* With the increased speeds and additional momentum on hills, VTR estimated that actual annual consumption of rail fuel will decrease by 100,500 gallons.

* The removal of trucks from the highway also decreases emissions

1B. Operational and Ridership Benefits Metrics: In the table(s) below, provide information on the anticipated levels of transportation benefits and ridership that are projected to occur in the corridor service or route, following completion of the proposed Corridor Program.

Note: The "Actual—FY 2008 levels" only apply to rail services that currently exist. If no comparable rail service exists, leave column blank.

Corridor Program Metric	Actual – FY 2008 levels	Projected Totals by Year		
		First full year of operation	Fifth full year of operation	Tenth full year of operation
Annual passenger-trips	46,881	70,422	75,631	82,687
Annual passenger-miles (millions)	8,953,118	17,511,000	18,806,244	20,560,845
Annual IPR seat-miles offered (millions)	20,655,433	34,759,000	34,759,033	34,759,033
Average number of daily round trip train operations (typical weekday)	1	1	1	1
On-time performance (OTP)[2]– percent of trains on time at endpoint terminals	39%	90%	90%	90%
Average train operating delays: minutes of en-route delays per 10,000 train-miles[3]	5,676	2,275	2,275	2,275
Top passenger train operating speed (mph)	110	110	110	110
Average scheduled operating speed (mph) (between endpoint terminals)	32.43	39.15	39.15	39.15

[2] 'On-time' is defined as within the distance-based thresholds originally issued by the Interstate Commerce Commission, which are: 0 to 250 miles and all Acela trains—10 minutes; 251 to 350 miles—15 minutes; 351 to 450 miles—20 minutes; 451 to 550 miles—25 minutes; and 551 or more miles—30 minutes.

[3] As calculated by Amtrak according to its existing procedures and definitions. Useful background (but not the exact measure cited on a route-by-route basis) can be found at pages E-1 through E-6 of Amtrak's May 2009 Monthly Performance Report at http://www.amtrak.com/pdf/0905monthly.pdf

(2) A. Economic Recovery Benefits: *Please limit response to 6,000 characters. For more information, see Section 5.1.1.2of the HSIPR Guidance.*

Describe the contribution the Corridor Program is intended to make towards economic recovery and reinvestment, including information on the following:

- How the Corridor Program will result in the creation and preservation of jobs, including number of onsite and other direct jobs (on a 2,080 work-hour per year, full-time equivalent basis), and timeline for achieving the anticipated job creation.
- How the different phases of the Corridor Program will affect job creation (consider the construction period and operating period).
- How the Corridor Program will create or preserve jobs or new or expanded business opportunities for populations in Economically Distressed Areas (consider the construction period and operating period).
- How the Corridor Program will result in increases in efficiency by promoting technological advances.
- How the Corridor Program represents an investment that will generate long-term economic benefits (including the timeline for achieving economic benefits and describe how the Corridor Program was identified as a solution to a wider economic challenge).
- If applicable, how the Corridor Program will help to avoid reductions in State-provided essential services.

Cambridge Systematics and EDRG conducted an assessment of economic recovery benefits. The following is a summary of these benefits. More detailed information is presented in the attached Economic Impact Analysis report.

The $70M in construction costs were estimated to create a total $99.33M in economic activity and 402 jobs: 175 jobs in the construction sector (direct), 120 jobs due to construction expenditures on purchases of materials and supplies (indirect), and 107 jobs due to the effects of construction wage expenditures on household supplies and services (induced). These 402 jobs provide over $25M in wages. The increase in Operations and Maintenance costs provides an increase in $9.7M in economic activity, 76 jobs, and $3.5M in additional wages. The Operational impact contains the sum of time, vehicle operating, and cost differential savings for passenger and freight rail which translate into increased production for the benefitting businesses which triggers increased purchasing and wage spending (so-called indirect and induced effects). Increased spending by additional tourists provides an additional 2,106 jobs through 2030.The aggregate cost savings to businesses and follow-on economic activity translates to an additional 49 permanent jobs in Vermont in the year 2030 and are associated with an increase $2.74M in gross state product. Over the life of the project (2009 to 2030), the investment in the Western Corridor rail line is expected to generate $30.58 in wages and over 786 jobs.

The definitions of a quality jobs vary, but several states set the following threshold for job-based tax incentive or grant programs:

- Wages greater than or equal to the local county wage, or
- Wages greater than or equal to the average state wage; and
- Health insurance coverage with at least a 50% employer paid premium
- Targeted industries, usually in manufacturing, transportation services and technologies (including technology related services) but excluding retail, hotel, restaurant and other services.

Employer sponsored health insurance, as a percentage of jobs, is found most prominently in industry sectors shown in Table 3.

Table 3.
Employers provide health care for at least 60% of jobs in six major economic sectors

Manufacturing	72%
Wholesale Trade	71%
Financial Services	70%
Construction	66%
Professional Services	65%
Utilities & transportation	64%

Source: Medical Expenditure Panel Survey, September 2005. Data are for 2003.

We propose the following definition for “quality jobs” based on TREDIS output:

Jobs in manufacturing, wholesale trade, financial services (which are primarily technology driven), construction, professional

services and utilities & transportation, commensurate with the percentages noted in Table 1, if the average wages are expected to be equal to, or greater than, the average wage in the state.

The direct impacts generated from the Western Corridor Project will generate 151 quality jobs in the study area, while the indirect and induced jobs will include 196 quality jobs statewide.

The corridor program is located along eight towns that are classified an Economically Distressed Area (see attached map). Workers in these towns are expected to benefit both during the construction and post-construction. Jobs that are long-term opportunities for low income workers are group in two ways. First, are industries that have quality and high-paying jobs noted above, which generally pay high wages. We assume that the jobs at the highest wages in these sectors are obtained by workers with higher education backgrounds, indicated by the 60% - 70% of jobs in these sectors that on average provide health insurance. The remaining jobs may be opportunities for lower income workers to gain entry into well paying sectors. These sectors generally do provide health insurance and jobs at the entry level may lead to advancement based on job performance and training/educational opportunities.

Secondly, the large numbers of retail, restaurant and service jobs in the economy are not all "bad jobs" as they have been described. The quintessential fast food or retail store clerk jobs include, in some cases, health and vacation benefits. Moreover, a career ladder is possible for some through chain stores' management programs, which enable promotions to assistant store managers, managers and then regional positions. This is certainly not true for all chained enterprises or all jobs (or personal situations), but it does provide opportunities for low income workers, who might not have a college degree.

About 50% of the retail and service sectors (other than professional services), overall, provide health insurance. Based on a review of the cross-tabulation of occupations, wages and industries maintained by the U.S Bureau of Labor Statistics, we are estimating that 10% of all jobs in these sectors involve professional occupations that require graduate-level education, such as financial, legal and technology professions, and that all of these jobs include health insurance benefits. Based on this overall framework, we classify the remaining jobs in these sectors that include health benefits as representing opportunities for low-income workers.

Estimates of Jobs by Sector that Provide Opportunities for Low Income Workers
Manufacturing 28%
Wholesale Trade 29%
Financial Services 30%
Construction 34%
Professional Services 35%
Utilities & transportation 36%
Other Services 39%
Retail 45%
Source: Medical Expenditure Panel Survey, Estimates by EDRG based on Bureau of Labor Statistics data

In addition, the Western Corridor project will create career opportunities for lower income wage earners, which pay a livable wage and offer the possibility of a career ladder. Based on direct impacts, it is anticipated that 109 such jobs will be generated in counties along the Western Corridor, while 141 additional such jobs will be created statewide from indirect and induced impacts.

2B. Job Creation. Provide the following information about job creation through the life of the Corridor Program. Please consider construction, maintenance and operations jobs.

Anticipated number of onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis).	FD/ Construction Period	First full year of operation	Fifth full year of operation	Tenth full year of operation
	402	4	4	4

(3) Environmental Benefits. *Please limit response to 6,000 characters.*

How will the Corridor Program improve environmental quality, energy efficiency, and reduce in the Nation's dependence on oil? Address the following:

- Any projected reductions in key emissions (CO2, O^3, CO, PMx, and NOx) and their anticipated effects. Provide any available forecasts of emission reductions from a baseline of existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation *(provide supporting documentation if available).*
- Any expected energy and oil savings from traffic diversion from other modes and changes in the sources of energy for transportation. Provide any available information on changes from the baseline of the existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation (*provide supporting documentation if available*).
- Use of green methods and technologies. Address green building design, "Leadership in Environmental and Energy Design" building design standards, green manufacturing methods, energy efficient rail equipment, and/or other environmentally-friendly approaches.

Improved rail operations will also affect the emissions associated with passenger and freight rail operations in Vermont. In addition to the cost savings associated with reductions in fuel use, emissions reductions will contribute to policy goals of the State of Vermont with regard to reduction of criteria pollutant emissions. These emission reductions have an economic value in terms of the market value of CO2 and other and emissions associated with rail operations. With additional ridership for passenger rail, there is an increase in emissions due to increased rail fuel usage which is balanced by the corresponding decrease in emissions due to reduced car VMT for commuters that are switching to rail transportation. On the freight rail side, according to Vermont Rail, with the increased freight rail speeds, the additional momentum, and higher throttle speeds is expected to reduce overall fuel consumption from current levels. With a truck to rail car diversion ratio conservatively at 3:1, truck to rail diversions provide a net overall reduction in gas consumption and associated emissions. Freight rail is considered to be more efficient in miles per gallon of fuel utilized and also produces significantly less emissions when compared to freight transported by truck. These emissions reductions have an economic value and were calculate using current market pricing estimates. Increased freight shipments via rail consequently result in increased emissions however the corresponding reductions in truck emissions are greater which provide a net environmental benefit.

Current State - Emissions - decreased truck volumes in 2030 (in 2030 Metric Tons)
VOC (1)
NOX (1)
CO (22)
CO2 (6,584)
Total: 6,607

Future State - Increase Passenger Rail & Freight Improvements (in 2030 MTs)
VOC (0.54)
NOX (15.09)
CO (1.61)
CO2 (497.20)
Total: 514

Value: $$
Rail emissions: $593,845
Truck emissions: $184,481
Net emissions reduction (2030): $778,326

Estimate of tons per pollution type (for VOC, NOx, CO, CO2, & PM)
The amount of tons per pollution type was calculated using several estimates. For each Western Corridor, the type of engine, average throttle run, and times savings were annualized and then used to estimate the overall hours and gallons of fuel saved. These savings (due to the "Build" scenario) were then cross referenced with the and EPA locomotive emissions table to estimate the decrease in kilograms per year which was then converted into tons per year. Car and truck emissions were estimated using the EPA Mobile 6 emissions table and state environmental estimates.

Estimate of costs per ton

The value per ton for CO2 and NOx was referenced from a study by EDR Group for the Connecticut Clean Energy Fund (CCEF). The NOx base price of $1,376/ton was based on the May 2009 tradable allowance permit price according to Cantor C02e . For C02, the 2009 base price of $6/ton was an estimate provided by the consulting firm KEMA. A 2.3% growth rate was applied to both pollution types.

For VOC, CO, and PM, the estimated cost per ton of emission was cited by the Victoria Transportation Planning Institute (VPTI). However, the NOx price per ton was estimated at $11,000. Believing the Cantor C02e price representing only 13% of the VPTI cost to be more realistic, the 13% value was applied to all of the VPTI cost estimates to create a new adjusted value per ton of emission. A growth rate of 3% was applied to these remaining pollution types.

The new adjusted cost estimates and emissions per tons were then multiplied to estimate the total savings per pollution type.

(4) Livable Communities Corridor Program Benefits Narrative. (*For more information, see Section 5.1.1.3 of the HSIPR Guidance, Livable Communities)**.** *Please limit response to 3,000 characters.*

How will the Corridor Program foster Livable Communities? Address the following:

- Integration with existing high density, livable development: Provide specific examples, such as (a) central business districts with walking/biking and (b) public transportation distribution networks with transit-oriented development.
- Development of intermodal stations: Describe such features as direct transfers to other modes (both intercity passenger transport and local transit).

Passenger rail facilities are located where they have efficient access to Burlington and Rutland's central business district (CBD) and public transportation network. Both Burlington and Rutland are compact cities – and among the most dense (Burlington = 2,512 persons per square mile, Rutland = 2,254 persons per square mile) in Vermont. Densities within the CBDs are three to four times higher than the city averages. Their pattern of development was set during the nineteenth century, evolving around railroad and industrial uses. The placement of the railyards dictated street grids that remain in place today. The CDBs grew up across from the rail yards, industrial uses located close to rail spurs, and residential neighborhoods grew where they were convenient to the employment of the time. In practical terms, Burlington and Rutland offer an integrated, intermodal transportation system that maximizes options for travelers. Travelers can exit a train in Rutland, walk around the CBD or take a local transit bus to virtually anywhere within wider the Rutland area.

There is currently no intercity bus transportation along the Western Corridor. While some commuter service is available, it does not adequately meet the intercity transportation needs of communities along the corridor. Three local transit providers - Addison County Transit Resources, Chittenden County Transportation Authority, and Marble Valley Regional Transit District - provide over 40 local transit routes in the area of the current and proposed Ethan Allen Express Service. MVRTD provides feeder service to Rutland Amtrak station while CCTA serves the Vermonter, Vermont's other Amtrak Service. These transit providers are well positioned to fully integrate with new passenger rail service in Burlington.

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E. Application Success Factors

(1) Project Management Approach and Applicant Qualifications Narrative. *Please provide separate responses to each of the following. Additional information on program management is provided in Section 5.1.2.1 of the HSIPR Guidance, Project Management.*

1A. Applicant qualifications.

Management experience: Does the applicant have experience in managing rail investments and Corridor Programs of a similar size and scope to the one proposed in this application?

☒ Yes - Briefly describe experience (brief project(s) overview, dates)
☐ No- Briefly describe expected plan to build technical and managerial capacity. Provide reference to Project Management Plan.

Please limit response to 3,000 characters.

VTrans has a significant amount of experince in managing large and complex rail projects. Some examples include:

- Western Corridor (completed), 2005-08, track, roadbed and bridge improvements, $7.2 million
- Western Corridor (currently), track, roadbed and bridge improvements, $23 million
- ABRB, 2002, track, roadbed and bridge improvements, $16 million
- Burlington Tunnel, 2008, $1.2 million
- Bellows Falls Tunnel, 2007, $2.8 million

VTrans' rail budget averages approximately $20 million anually, of which approximately two thirds is used for capital projects. The Agency's rail staff currently consists of 10 members, and includes project managers, construction and engineering specialists, and administrative support. In addition, VTrans' Rail Section has a number of rail consulting firms on retainer, who undertake design and engineering work.

1B. Describe the organizational approach for the different Corridor Program stages included in this application (e.g., final design, construction), including the roles of staff, contractors and stakeholders in implementing the Corridor Program. For construction activities, provide relevant information on work forces, including railroad contractors and grantee contractors. *Please limit response to 3,000 characters.*

The project management approach encompasses a number of experienced VTrans transportation staff and relies on consultants to augment and support the VTrans workforce. The VTrans project manager performs the functions necessary to maintain, monitor and verify the project schedule and budget. The project management approach will include the following:

• Organization, mobilization and direction of the work.
• Execution of design, procurement and construction.
• Project controls, including cost and quality control.
• Coordination and management of the work of consultants and contractors.
• Administration and project procedures.
• Quality assurance.
• Safety and Security.
• Project Management.
• Administrative and technical support.

VTrans' Rail Section is located within the Operations Division, and is responsible for the full range of planning, program management, project management, and technical oversight activities for rail capital projects. The Rail Section currently manages dozens of individual projects. Most recently, rail investments have focused on projects throughout the State to improve railroad network capacity and efficiency and improve vertical clearances.

Each rail grant project is assigned a VTrans project manager from the Rail Section and follows a workflow which has several

controls and review steps. Consultant managers are used to assist with various technical tasks. VTrans will progress project construction third party bid solicitations. Once construction is authorized, construction reimbursement activities will be performed VTrans' project manager. VTrans' staff and consultant manager will inspect construction activities to ensure conformance with the plans, specifications and terms of agreements.

More detail on the organizational approach is detailed in the attached Program Management Plan.

1C. Does any part of the Corridor Program require approval by FRA of a waiver petition from a Federal railroad safety regulation? (Reference to or discussion of potential waiver petitions will not affect FRA's handling or disposition of such waiver petitions).

☐ YES- If yes, explain and provide a timeline for obtaining the waivers
☒ NO
Please limit response to 1,500 characters.

1D. Provide a preliminary self-assessment of Corridor Program uncertainties and mitigation strategies (consider funding risk, schedule risk and stakeholder risk). Describe any areas in which the applicant could use technical assistance, best practices, advice or support from others, including FRA. *Please limit response to 2,000 characters.*

The following is a summary of risk assessment and mitigation component of the Program Management Plan (attached). Please consultant the full document for a more detailed description.

Funding Risk: Vermont faces the challenge or revenues not keeping pace with the demand to improve transportation infrastructure. This challenge poses a risk that sufficient funding will not be available to address growing needs.

Schedule Risk: The purpose of ARRA is to put money to work quickly to stimulate the economy. Because of this, ARRA timelines pose a risk that VTrans may not be able to deliver on the project quickly enough to satisfy ARRA timelines for obligation and construction, etc. The availability of contractors to complete the work is also a potential schedule risk.

Stakeholder Risk: Groups and individuals responsible for avoiding or mitigating identified risks include:
- VTrans
- Vermont Rail System
- Consultant Teams

Stakeholders risk include one of the parties failing to perform, thereby jeopardizing the corridor program's funding /schedule.

Mitigation strategies to minimize risk include:

Financial Leverage & Flexibility: VTrans' annual budget exceeds $400 million dollars. The Agency has sufficient flexibility to shift funding between projects to accommodate unforeseen cost overruns, and can also shift funding between programs if necessary. VTrans also has the to authority to issue bonds to accommodate unforseen program costs.

Monotoring: Active budget monitoring process whereby finance and budget staff meet regularly with program management staff to monitor expected costs at a both a project and overall program level of detail. This careful monitoring allows us to identify in advance when and where potential budgetary adjustments may become necessary.

Human Resources: Project implementation at VTrans involves planning, engineering, financial and management staff pulled from throughout the Agency, and is augmented with consulting retainer contracts.

(2) Stakeholder Agreements Narrative. *Additional information on Stakeholder Agreements is provided in Section 5.1.2.2 of the HSIPR Guidance.*

Under each of the following categories, describe the applicant's progress in developing requisite agreements with key stakeholders. In addition to describing the current status of any such agreements, address the applicant's experience in framing and implementing similar agreements, as well as the specific topics pertaining to each category.

2A. Ownership Agreements – Describe how agreements will be finalized with railroad infrastructure owners listed in the "Right-of-Way Ownership" and "Service Description" tables in Section B. If appropriate, "owner(s)" may also include operator(s) under trackage rights or lease agreements. Describe how the parties will agree on Corridor Program design and scope, benefits, implementation, use of Corridor Program property, maintenance, scheduling, dispatching and operating slots, Corridor Program ownership and disposition, statutory conditions and other essential topics. Summarize the status and substance of any ongoing or completed agreements. *Please limit response to 3,000 characters.*

The State of Vermont is in a unique with this corridor program. The State is the owner of the rail line between Burlington and Rutland and the Vermont Railway is its chosen freight operator. Vermont Railway owns and operates the CLP. This relationship with the vermont Railway has existed since 1954 and numerous project agreements have been negotiated between the two parties, included the development of thirteen miles of commuter rail on the norther section of the line (that is no loner in service). Attached is an MOU between the State and the railroad which addresses the issues above and will be finalized in the project agreement on the respective railroads.

2B. Operating Agreements – Describe the status and contents of agreements with the intended operator(s) listed in "Services" table in the Application Overview section above. Address Corridor Program benefits, operation and financial conditions, statutory conditions, and other relevant topics. *Please limit response to 3,000 characters.*

Vermont has had an operating agreement with Amtrak for passenger rail service since 1995. Vermont also contracts with short lines to operate freight service over state-owned rail lines, which includes the Vermont Railway segment in this application.

The contractural agreement between the State of Vermont and Vermont Railway has existed since 1964 and the railroad has been a partner with the State in the development of the necessary improvement plans to initiate intercity passenger rail service. The railroad understand the potential benefits of this corridor program and is in complete agreement with its goals.

2C. Selection of Operator – If the proposed operator railroad was not selected competitively, please provide a justification for its selection, including why the selected operator is most qualified, taking into account cost and other quantitative and qualitative factors, and why the selection of the proposed operator will not needlessly increase the cost of the Corridor Program or of the operations that it enables or improves. *Please limit response to 3,000 characters.*

Amtrak has been the State of Vermont's operator of choice since 1995. To our knowledge, there are no other qualified intercity passenger rail providers that can cost effictively provide the services that Amtrak provides under current agreements. Since the route that is used for passenger rail service transits multiple railroads, a specific railroad operator is not logical, cost-effective option for the provision of passenger rail service. Amtrak is the only entity that has right of access to the various freight rail networks at incremental cost.

2D. **Other Stakeholder Agreements** – Provide relevant information on other stakeholder agreements including State and local governments. *Please limit response to 3,000 characters.*

The City of Rutland owns the rail station and leases the station to Amtrak for intercity passnger services. The State of Vermont has a long-term lease for the Main Street Landing station in Burlington, the terminus for this route. Amtrak negotiates all access and trackage rights on behalf of the State.

2E. Agreements with operators of other types of rail service - Are benefits to non-intercity passenger rail services (e.g., commuter, freight) foreseen? Describe any cost sharing agreements with operators of non-intercity passenger rail

service (e.g., commuter, freight). *Please limit response to 3,000 characters.*

Some limited freight benefits are anticipated for Vermont Railway and CLP in reducedtrip times. The attached MOU with Vermont Railway and CLP details cost-sharing arrangements for this corridor program, which will be finalized in the projects agreements with the railroad. In the MOU, the railroad has agreed to provide in-kind services on the CLP at a value estimated at $230,000 for labor and equipment for surfacing.

(3) Financial Information

3A. Capital Funding Sources. Please provide the following information about your funding sources (if applicable).

Non FRA Funding Sources	New or Existing Funding Source?	Status of Funding[4]	Type of Funds	Dollar Amount (millions of $ YOE)	% of Program Cost	Describe uploaded supporting documentation to help FRA verify funding source
State	New	Committed	State Transportation Funds	$1,770,000	2%	Financial Plan
Private	New	Committed	CLP Railroad in-kind	$230,000	0.5%	Financial Plan
	New	Committed				
	New	Committed				

3B. Capital Investment Financial Agreements. Describe any cost sharing contribution the applicant intends to make towards the Corridor Program, including its source, level of commitment, and agreement to cover cost increases or financial shortfalls. Describe the status and nature of any agreements between funding stakeholders that would provide for the applicant's proposed match, including the responsibilities and guarantees undertaken by the parties. Provide a brief description of any in-kind matches that are expected. *Please limit response to 3,000 characters.*

The CLP has committed to performing two passes of surfacing required for the track project of this corridor program. Their contribution includes both equipment and personel to operate the equipment. This task is included in the MOU.

3C. Corridor Program Sustainability and Operating Financial Plan.

Please report on the Applicant's projections of future financial requirements to sustain the service by completing the table below (in YOE dollars) and answering the following question. Describe the source, nature, share, and likelihood of each identified funding source that will enable the State to satisfy its projected financial support requirements to sustain the operation of the service addressed in this Corridor Program. *Please limit response to 2,000 characters.*

The Vermont Agency of Transportation prepares an annual budget that is presented to the Vermont Legislature for approval each January. The Agency budget is developed by staff in each division. The Amtrak line item is included in the Rail Section of the Operations Division Budget. The dedicated State Transportation Funds are the source of the funds for the Amtrak Contract and other expenses related to the operation of the State supported services, The Vermonter and The Ethan Allen Express. Funding for the Amtrak line has a tremendous amount of support in the Legislature and has been fully funded annually since the inception of the Vermonter service in 1995. Since that time the Legislature has included funding for the state's passenger rail services (over $30 million) as well as capital improvement projects related to the expansion of those services. There is every reason to expect that the support for the Amtrak service will continue and grow in the future.

Note: Please enter supporting projections in the Track 2 Application Supporting Forms, and submit related funding agreements or other documents with the Supporting Materials described in Part G of this Track 2 Application. The numbers entered in this table must agree with analogous numbers in the Supporting Forms.

[4] Reference Notes: The following categories and definitions are applied to funding sources:
Committed: Committed sources are programmed capital funds that have all the necessary approvals (e.g. legislative referendum) to be used to fund the proposed phase without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or State Capital Investment Program CIP or appropriation. Examples include dedicated or approved tax revenues, State capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed phase, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed phase.
Budgeted: This category is for funds that have been budgeted and/or programmed for use on the proposed phase but remain uncommitted, i.e., the funds have not yet received statutory approval. Examples include debt financing in an agency-adopted CIP that has yet to be committed in their near future. Funds will be classified as budgeted where available funding cannot be committed until the grant is executed, or due to the local practices outside of the phase sponsor's control (e.g., the phase development schedule extends beyond the State Rail Program period).
Planned: This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed nor budgeted. Examples include proposed sources that require a scheduled referendum, requests for State/local capital grants, and proposed debt financing that has not yet been adopted in the agency's CIP.

Funding Requirement (as identified on the Supporting Form)		**Projected Totals by Year ($ Millions Year Of Expenditure (YOE)* Dollars - One Decimal)**		
	Baseline Actual-FY 2009 Levels (State operating subsidy for FY 2009 if existing service)	**First full year of operation**	**Fifth full year of operation**	**Tenth full year of operation**
Indicate the Fiscal Year	2009	2012	2017	2022
Surplus/deficit after capital asset renewal charge[5]	$1,722,000	1,485,000	1,779,000	2,084,000
Total Non-FRA sources of funds applicable to the surplus/deficit after capital asset renewal	$1,722,000	1,485,000	1,779,000	2,084,000
Funding Requirements for which Available Funds Are Not Identified	0	0	0	0

* Year-of-Expenditure (YOE) dollars are inflated from the base year. Applicants should include their proposed inflation assumptions (and methodology, if applicable) in the supporting documentation.

Note: Data reported in this section should be consistent with the information provided in the Operating and Financial Performance supporting form for this application.

[5] The "capital asset renewal charge" is an annualized provision for **future** asset replacement, refurbishment, and expansion. It is the annualized equivalent to the "continuing investments" defined in the FRA's Commercial Feasibility Study of high-speed ground transportation (*High-Speed Ground Transportation for America*, September 1997, available at http://www.fra.dot.gov/us/content/515 (see pages 5-6 and 5-7).

(4) Financial Management Capacity and Capability – Provide audit results and/or other evidence to describe applicant capability to absorb potential cost overruns, financial shortfalls identified in 3C, or financial responsibility for potential disposition requirements (include as supporting documentation as needed). Provide statutory references/ legal authority to build and oversee a rail capital investment. *Please limit response to 3,000 characters.*

VTrans' average annual budget exceeded $400 million dollars over the five-year period 2005-2009. For FY2010, including currently available Recovery Act (ARRA) funding, the budget is $558 million. The Agency has sufficient flexibility to shift funding between projects to accommodate unforeseen cost overruns, and can also shift funding between programs if necessary. Adding to this capability is active budget monitoring process whereby finance and budget staff meet regularly with program management staff (monthly at minimum) to monitor expected costs at a both a project and overall program level of detail.

Vermont also recently enacted legislation that adds infrastructure assessments to sales of motor fuels – diesel and gasoline – that are dedicated exclusively to long term transportation infrastructure investments. These assessments have the additional advantage of serving as a dedicated revenue source to pay debt service on revenue bonds for transportation investments if necessary. The potential for issuing bonds provides additional capacity, if needed, to accommodate unforeseen project and program cost overruns.

According to the State's Comprehensive Annual Financial Report (2008), Vermont reported net assets of $1.424 billion, comprised of $2.613 billion in total assets offset by $1.190 billion in total liabilities at June 30, 2008. The State's governmental funds reported combined ending fund balances of $420.6 million. Of this amount, $244.2 million is available for spending at the State's discretion (unreserved fund balance).

The specific statutory authority to build and oversee rail capital investments lies in two titles of Vermont State Statutes that set state policy for railroads, and acquisition & modernization (see attached). Title 19 (Chapter 1) § 10e 'Statement of policy; railroads' recognizes the importance of passenger rail service as an integral part of the state's transportation network and directs VTrans to fully integrate it with other modal efforts. This directive includes – among the many policies included – (1) to cooperate with the federal government, other states, and providers of those services, to provide opportunities for rail passenger services; (2) to preserve and modernize for continued railroad service those railroad lines, both within the state of Vermont and extending into adjoining states, which directly affect the economy of the state; and (3) to preserve established railroad rights-of-way for future reactivation of railroad service. This section also directs VTrans to seek federal aid for rail projects that implement policy goals contained in statute.

Title 5 (Chapter 58), 3403 § 3403 'Acquisition and modernization' includes specific authority to rebuild any state-owned railroad property and to spend appropriated funds for the modernization of any state-owned railroad property.

(5) Timeliness of Corridor Program Completion – Provide the following information on the dates and duration of key activities, if applicable. For more information, see Section 5.1.3.1 of the HSIPR Guidance, Timeliness of Corridor Program Completion.

Final Design Duration:	5 months
Construction Duration:	24 months
Rolling Stock Acquisition/Refurbishment Duration:	N/A months
Service Operations Start date:	10/2011 *(mm/yyyy)*

(6) If applicable, describe how the Corridor Program will promote domestic manufacturing, supply and industrial development, including furthering United States-based equipment manufacturing and supply industries. *Please limit response to 1,500 characters.*

Promoting domestic manufacturing, supply and industrial development is a major objective of ARRA, as evidenced by the "Buy America" provisions. This corridor program grant application seeks to further this goal in two ways. First, the major materials to be procured as part of this corridor program include crossties, continuous welded rail, turnouts and signal materials. These materials are overwhelmingly purchased from U.S. manufacturers. A review of materials acquired for state projects indicate that few were purchased outside the U.S. This corridor program will therefore

provide a boost to the domestic manufacturing and industrial base - both from end-product manufacturers as well as their suppliers. Secondly, it is anticipated that the service reliability increase along with the service extension to Vermont's industrial base in Burlington will spur economic development in the form of new plants and industries along the rail line. As more businesses have access to Burlington, Albany,NY and New York City, the attractiveness of Western Vermont for manufacturing will be aggresively promoted by local, regional and state economic development organizations.

(7) If applicable, describe how the Corridor Program will help develop United States professional railroad engineering, operating, planning and management capacity needed for sustainable IPR development in the United States. *Please limit response to 1,500 characters.*

The corridor program - including its component projects - will help develop U.S. professional railroad engineering, operating, planning and management capacity is a number of ways. First, the availability of substantial federal investments in passenger rail has led to a flury of planning activity, unprecedented before the HSIPR program. Planners who have not traditionally focused on rail planning are in the process of developing a knowledge base that will sustain IPR development for generations to come. In addition, this program will result in significant opportunities for rail engineering, translating into advanced skill sets needed for future IPR development. Unlike highway or airport programs - funded at significant levels for a half century - opportunities for rail engineers have been limited due to a lack of funding. This corridor program includes substantial rail engineering work, helping to develop additional capacities among the small but growing cadre of rail engineers. Finally, a corridor program of this scale will result in new operating and management capacities. The process of managing a program of this size will provide VTrans with the needed capacities to sustain future IPR pograms in the future.

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F. Additional Information

(1) Please provide any additional information, comments, or clarifications and indicate the section and question number that you are addressing (e.g., Section E, Question 1B). *This section is optional.*

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G.Summary of Application Materials

Note: In addition to the requirements listed below, applicants must comply with all requirements set forth in the HSIPR Guidance and all applicable Federal laws and regulations, including the American Recovery and Reinvestment Act of 2009 (ARRA) and the Passenger Rail Investment and Improvement Act of 2008 (PRIIA).

Application Forms	Required for Corridor Programs	Required for Projects [See Note Below]	Reference	Comments
☒ This Application Form	✓		HSIPR Guidance Section 4.3.3.3	
☒ Corridor Service Overview (Same Corridor Service Overview may be used for multiple applications)	✓		HSIPR Guidance Section 4.3.3.3	
Supporting Forms (*Forms are provided by FRA on Grant Solutions and the FRA website*)	**Required for Corridor Programs**	**Required for Projects [See Note Below]**	**Reference**	**Comments**
☒ General Info	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
☒ Detailed Capital Cost Budget	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
☒ Annual Capital Cost Budget	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
☒ Operating and Financial Performance and Any Related Financial Forms	✓		HSIPR Guidance Section 5.3.5	FRA Excel Form

☒ Program or Project Schedule	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
Supporting Documents *(Documents to be generated and provided by the applicant)*	**Required for Corridor Programs**	**Required for Projects [See Note Below]**	**Reference**	**Comments**
☒ Map of Corridor Service	✓		Corridor Service Overview Question B.2	
☒ Service Development Plan	✓		HSIPR Guidance Section 1.6.2	
☒ "Service" NEPA	✓		HSIPR Guidance Section 1.6.2	
☒ Project Management Plan	✓		HSIPR Guidance Section 4.3.3.2	
☒ "Project" NEPA (Required before obligation of funds)		✓	HSIPR Guidance Section 1.6.2	
☒ PE Materials	✓	✓	HSIPR Guidance Section 1.6.2	
☒ Stakeholder Agreements	✓	✓	HSIPR Guidance Section 4.3.3.2	
☒ Financial Plan	✓	✓	HSIPR Guidance Section 4.3.3.2	
☒ Job Creation	✓	✓	HSIPR Guidance Section 1.6.2	

Standard Forms *(Can be found on the FRA website and www.forms.gov)*	**Required for Corridor Programs**	**Required for Projects [See Note Below]**	**Reference**	**Comments**
☒ SF 424: Application for Federal Assistance	✓		HSIPR Guidance Section 4.3.3.3	Form
☒ SF 424C: Budget Information-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
☒ SF 424D: Assurances-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
☒ FRA Assurances Document	✓		HSIPR Guidance Section 4.3.3.3	Form
Note: Items checked under "Corridor Programs" are required at the time of submission of this Track 2 Corridor Programs application. Items checked under "Projects" are optional at the time of submission of this Track 2 Corridor Programs application, but required prior to FD/Construction grant award.				

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